Alpha Virus nsp3 alignment

CLUSTAL W (1.82) multiple sequence alignment

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SFV_nsp3
ONV_nsp3
                APSYRVKRADIATCTEAAVVNAANARGTVGDGVCRAVAKKWPSAFKGAATPVGTIKTVMC 60
                APSYRVKRMDIAKNTEECVVNAANPRGVPGDGVCKAVYRKWPESFRNSATPVGTAKTIMC 60
RRV nsp3
                APSYRVRRTDISGHAEEAVVNAANAKGTVGVGVCRAVARKWPDSFKGAATPVGTAKLVOA 60
SinV nsp3
                APSYRTKRENIADCQEEAVVNAANPLGRPGEGVCRAIYKRWPTSFTDSATETGTARMTVC 60
                APSYHVVRGDIATATEGVIINAANSKGQPGGGVCGALYKKFPESFDLQPIEVGKARLVKG 60
VEEV_nsp3
                              * ::**** * * *** *: ::: * :*
SFV nsp3
                GSYPVIHAVAPNFSATTEAEGDRELAAVYRAVAAEVNRLSLSSVAIPLLSTGVFSGGRDR 120
ONV nsp3
                GQYPVIHAVGPNFSNYSEAEGDRELASVYREVAKEVSRLGVSSVAIPLLSTGVYSGGKDR 120
RRV nsp3
                NGMNVIHAVGPNFSTVTEAEGDRELAAAYRAVAGIINASNIKSVAIPLLSTGVFSGGKDR 120
SinV_nsp3
VEEV_nsp3
                LGKKVIHAVGPDFRKHPEAEALKLLQNAYHAVADLVNEHNIKSVAIPLLSTGIYAAGKDR 120
                AAKHIIHAVGPNFNKVSEVEGDKQLAEAYESIAKIVNDNNYKSVAIPLLSTGIFSGNKDR 120
                               .*.*. : * .*. :* :. . .********:::..:**
SFV nsp3
                LQQSLNHLFTAMDATDADVTIYCRDKSWEKKIQEAIDMRTAV-ELLNDD----VELTTDL 175
ONV_nsp3
                LLQSLNHLFAAMDSTDADVVIYCRDKEWEKKITEAISLRSQV-ELLDDH----ISVDCDI 175
RRV nsp3
                VMQSLNHLFTAMDTTDADVVIYCRDKAWEKKIQEAIDRRTAV-ELVSED----ISLESDL 175
SinV nsp3
                LEVSLNCLTTALDRTDADVTIYCLDKKWKERIDAALQLKESVTELKDED----MEIDDEL 176
VEEV nsp3
                LTQSLNHLLTALDTTDADVAIYCRDKKWEMTLKEAVARREAVEEICISDDSSVTEPDAEL 180
                   *** * :*:* **** ** *: : *: : *:
SFV nsp3
                VRVHPDSSLVGRKGYSTTDGSLYSYFEGTKFNQAAIDMAEILTLWPRLQEANERICLYAL 235
ONV nsp3
                VRVHPDSSLAGRKGYSTVEGALYSYLEGTRFHQTAVDMAEIYTMWPKQTEANEQVCLYAL 235
RRV nsp3
               IRVHPDSCLVGRKGYSITDGKLHSYLEGTRFHQTAVDMAEISTLWPKLQDANEQICLYAL 235
SinV nsp3
                VWIHPDSCLKGRKGFSTTKGKLYSYFEGTKFHQAAKDMAEIKVLFPNDQESNEQLCAYIL 236
               VRVHPKSSLAGRKGYSTSDGKTFSYLEGTKFHQAAKDIAEINAMWPVATEANEQVCMYIL 240
VEEV nsp3
                : :**.*. * ****: * .* .**:**:* ::*
               GETMDNIGSKCPVNDSDSSTPPRTVPCLCRYAMTAERIARLRSHQVKSMVVCSSFPLPKY 295
SFV nsp3
ONV nsp3
                GESIESVRQKCPVDDADASFPPKTVPCLCRYAMTPERVARLRMNHTTSIIVCSSFPLPKY 295
RRV_nsp3
               GESMDSIRTKCPVEDADSSTPPKTVPCLCRYAMTAERVARLRMNNTKAIIVCSSFPLPKY 295
SinV_nsp3
               GETMEAIREKCPVDHNPSSSPPKTLPCLCMYAMTPERVHRLRSNNVKEVTVCSSTPLPKH 296
VEEV nsp3
               GESMSSIRSKCPVEESEASTPPSTLPCLCIHAMTPERVQRLKASRPEQITVCSSFPLPKY 300
               **::.: ****:. :* ** *:*** :***.**: **:
SFV_nsp3
               HVDGVQKVKCEKVLLFDPTVPSVVSPRKYAAS----TTDHSDRSLRGFDLDWTTDSSST 350
ONV_nsp3
               KIEGVQKVKCSKALLFDHNVPSRVSPRTYRPADEIIQTPQTPTEACQDAQLVQSINDEAV 355
RRV nsp3
               RIEGVOKVKCDRVLIFDOTVPSLVSPRKYIPAAASMHADTVSLDSTVSTGSAWSFPSEAT 355
SinV_nsp3
               KIKNVQKVQCTKVVLFNPHTPAFVPARKYIEVPE---QPTAPPAQAEEAPEVVATPSPST 353
VEEV_nsp3
               RITGVQKIQCSQPILFSPKVPAYIHPRKYLVETPPVEETPESPAENQSTEGTPEQPALVN 360
                                 .*: : .*.*
SFV_nsp3
               -----ASDTMSLPSLQSCDIDSIYEPMAP-----IVVTADVHP----EPAGI 388
ONV_nsp3
               PVPSDLEACDATMDWPSIGTVSTRQRHDSSDSEYSGSRSNIQLVTADVHAPMYAHSLASS 415
RRV nsp3
               -YETMEVVAEVHHSEPPVPPPRRRRAQVTMHH-----QELLEVSDMHT-----PIAAR 402
SinV nsp3
               ADNTSLDVTDISLDMDDSSEGSLFSSFSGSDN-----SITSMDSWS----SGPSS 399
VEEV nsp3
               VDATRTRMPEPIIIEEEEEDSISLLSDGPTHQ-----VLQVEADIHG----SPSVS 407
SFV nsp3
               ADLAADVHPEPADH-----VDLEN------PIPPPRPKRAAYLASRAAER----- 427
ONV_nsp3
               GGSMLSLSSEPAQNGTMILLDSEDTDSISRVSTPIAPPRRRLGRTINVTCDERE--GKIL 473
RRV nsp3
               VEIPVYDTAVVAER-VAIPCTSEY-----ATPIPTPRAVRVVPVPAPRIORASTYRVS 454
               LEIVDRRQVVVADV----HAVQEP-----APIPPPRLKKMARLAAARKEPTPPASNS 447
SinV nsp3
               SSSWSIPHASDFDVDSLSILDTLDG------ASVTSGAVSAETNSYFARSMEFRAR 457
VEEV nsp3
SFV nsp3
               PVPAPR-KPTPAPRTAFR------462
               PMASDR-FFTAKPYTVALSVSTADMTVYPIQAPLGLIPPPTLEPITFGDFAEGEIDNL-- 530
ONV nsp3
               PTPTPR-VLRASVCSVTTSAG----VEFPWAPEDLEVLTEPVHCEMREPVELPWEPE-- 506
RRV_nsp3
SinV_nsp3
               SESLHL-SFGGVSMSLGSIFDG---ETARQAAVQPLATGPTDVPMSFGSFSDGEIDELSR 503
VEEV nsp3
               PVPAPRTVFRNPPHPAPRTRTP----PLAHSRASSRTSLVSTPPGVNRVITREELEALTP 513
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SFV nsp3	ASG-ITFGDFDDVLRLGRAGA 4	82
ONV_nsp3	LTGALTFGDFEPGEVEELTDSEWSTCSDTDEELRLDRAGG 5	70
RRV_nsp3	DVD-IQFGDFETPDKIQFGDIDFDQF 5	31
SinV_nsp3	RVTESEPVLFGSFEPGEVNSIISSRSAVSFPLRKQRRRRRSRRTEY 5	49
VEEV_nsp3	SRAPSRSASRTSLVSNPPGVNRVITREEFEAFVAQQQ 5	
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